lance-leaved grape-fern Ophioglossaceae (Adder's Tongue Family)

Status: State Watch

Rank: G5S3

General Description: From Wagner and Wagner (1993): Trophophore stalk 0-<1/16 inch. Blade dull to shiny green to dark green, deltate, 1-2 pinnate, to 2½ by 2¾ inches. Pinnae to 5 pairs, ascending, approximate, linear to broadly lanceolate, entire to divided to tip. Margins with distinct lines or segments, apex acute to rounded, venation pinnate. Sporophores 1-3 pinnate, 1-2½ times the length of the trophophore, divided into several equally long branches.

Identification Tips: According to Wagner (1991), *B. lanceolatum* is "...likely to be confused only with small, sterile plants of *B. virginianum*." The sterile blade of *B. virginianum* is generally more divided.

Phenology: Spores mature in July and August.

Range: Occurs in many western states, northward to British Columbia and Alaska. Scattered in Washington, mostly west of the Cascades and in the Olympics, but also known from several northeastern counties.

Habitat: Well-drained meadows, wet, mossy benches in mature red cedar forests, mossy talus slopes near creek drainages, mixed mature coniferous forests, alpine meadows, roadbeds and disturbed areas. Frequently found in close association with *B. pinnatum* and *B. minganense*. Elevation ranges from 700 to 6000 feet.

Ecology: This species appears to have a relatively wide ecological amplitude (see Habitat section above). It also appears to withstand some level of disturbance, and may even invade heavily disturbed sites, such as old roadbeds.

State Status Comments: There are over 80 occurrences in Washington, but most have less than 20 plants.

Inventory Needs: Additional surveys are needed throughout the species' range in order to better assess its distribution and abundance.

Threats and Management Concerns: Threats potentially include

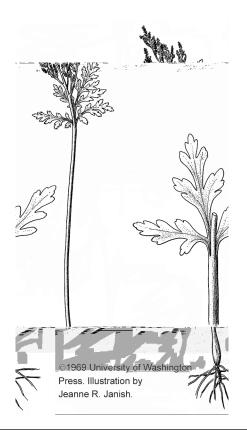
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timber harvesting, road building, grazing, and trampling.

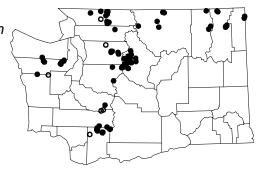
References:

- Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1969.
 Vascular Plants of the Pacific Northwest, Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons. University of Washington Press, Seattle. 914 pp.
- Lellinger, D.B. 1985. A Field Manual of the Ferns & Fern-Allies of the United States & Canada. Smithsonian Institution Press, Washington, D.C.
- Wagner, D. 1991. Guide to the species of *Botrychium* in Oregon. Preliminary draft. Unpublished report. n.p.
- Wagner, W.H. Jr., and F.S. Wagner. 1993. Flora of North America, Volume 2: Pteridophytes and Gymnosperms. Treatment of the Ophioglossaceae Family. pp. 85-106.

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Known distribution of *Botrychium lanceolatum* in Washington



- Current (1980+)
- O Historic (older than 1980)

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